

Message Text

UNCLASSIFIED

PAGE 01 BONN 07341 01 OF 03 281609Z
ACTION SS-15

INFO OCT-01 EUR-12 IO-13 ISO-00 AID-05 CEA-01 CIAE-00
COME-00 DODE-00 EB-08 FEAE-00 FPC-01 H-02 INR-07
INT-05 L-03 NSAE-00 NSC-05 OMB-01 PM-04 OES-06
SP-02 STR-04 TRSE-00 ACDA-10 NSCE-00 SSO-00
USIE-00 INRE-00 NRC-07 /112 W
-----281701Z 030597 /50

O O 281603Z APR 77 ZFF 4
FM AMEMBASSY BONN
TO SECSTATE WASHDC NIACT IMMEDIATE 7780
INFO AMEMBASSY LONDON IMMEDIATE
AMEMBASSY PARIS
USMISSION EC BRUSSELS
USMISSION OECD PARIS
USMISSION IAEA VIENNA
ERDA WASHDC
ERDA GERMANTOWN

UNCLAS SECTION 01 OF 03 BONN 07341

DEPT FOR DEPSEC CHRISTOPHER; DEPT PASS TO NRC
LONDON FOR NYE

E.O. 11652: N/A
TAGS: ENRG, TECH, GW
SUBJECT: NEW GERMAN ENERGY R AND D PROGRAM

REF: A. BONN A-125

1. SUMMARY: FEDERAL RESEARCH MINISTER HANS MATTHOEFER
ANNOUNCED THE DM 6.5 BILLION R AND D PROGRAM FOR
NUCLEAR AND NON-NUCLEAR ENERGY APRIL 27. EMBASSY WILL
TRANSMIT GERMAN LANGUAGE R AND D PROGRAM VIA AIRGRAM
AND UNDER SEPARATE COVER VIA INTERNATIONAL AIRMAIL TO
RONALD CASAGRANDE, EUR/CE. THE FRG WILL CONTINUE ITS
CURRENT NUCLEAR R AND D POLICY WITH LITTLE CHANGE. IN
UNCLASSIFIED

UNCLASSIFIED

PAGE 02 BONN 07341 01 OF 03 281609Z

PARTICULAR, ALL REPROCESSING AND FAST BREEDER PROJECTS
WILL BE IMPLEMENTED AS PLANNED. THIS IS THE HIGHLIGHT
OF THE NEW FEDERAL "PROGRAM FOR ENERGY RESEARCH AND
ENERGY TECHNOLOGIES 1977-80". THE PROGRAM WAS APPROV-
ED BY THE CABINET WHICH DISCUSSED THE DRAFT PROVIDED
BY THE FEDERAL MINISTRY FOR RESEARCH AND TECHNOLOGY
(BMFT). THE RATIO OF RESEARCH FUNDS (NUCLEAR: NON-

NUCLEAR ENERGY RESEARCH) WILL SHIFT FROM 4.3:1 TO
2.7:1 BY 1980. END SUMMARY.

2. THE NEW ENERGY PROGRAM MARKS A SIGNIFICANT
CHANGE IN GERMAN R AND D POLICY, BECAUSE FOR THE FIRST
TIME BOTH NUCLEAR AND NON-NUCLEAR ENERGY SECTORS ARE
INCORPORATED. THE FOUR MAIN SECTIONS OF THE PROGRAM
ARE:

1. RATIONAL ENERGY USE IN PRIMARY AND
SECONDARY UTILIZATION,
2. COAL AND OTHER FOSSIL ENERGY SOURCES,
- 3 3. NEW ENERGY SOURCES.
4. NUCLEAR ENERGY.

OTHER TOPICS INCLUDE ASSESSMENTS OF THE
CURRENT AND FUTURE ENERGY SITUATION IN THE FRG
AND A SHORT OUTLINE OF GERMANY'S NATIONAL
AND INTERNATIONAL EFFORTS TO ACHIEVE THE
PROJECTED GOALS. THE GENERAL ENERGY POLICY
AND ECONOMIC GOALS THAT UNDERLIE THIS NEW
R & D PROGRAM HAVE BEEN ANNOUNCED BY THE
FEDERAL MINISTRY FOR ECONOMICS ON MARCH 23(REF A).

3. THIS CABLE WILL COVER NUCLEAR ENERGY, SUBSEQUENT
REPORTS WILL DEAL WITH THE OTHER TOPICS. THE
UNCLASSIFIED

UNCLASSIFIED

PAGE 03 BONN 07341 01 OF 03 281609Z

FIVE AREAS OF FEDERAL FUNDING IN THE FIELD OF
NUCLEAR ENERGY ARE:

A. NUCLEAR SAFETY RESEARCH AND
RADIATION PROTECTION

B. NUCLEAR FUEL CYCLE

UNCLASSIFIED

NNN

UNCLASSIFIED

PAGE 01 BONN 07341 02 OF 03 281619Z
ACTION SS-15

INFO OCT-01 EUR-12 IO-13 ISO-00 AID-05 CEA-01 CIAE-00
COME-00 DODE-00 EB-08 FEAE-00 FPC-01 H-02 INR-07
INT-05 L-03 NSAE-00 NSC-05 OMB-01 PM-04 OES-06
SP-02 STR-04 TRSE-00 ACDA-10 NSCE-00 SSO-00
USIE-00 INRE-00 NRC-07 /112 W
-----281702Z 030713 /50

O O 281603Z APR 77 ZFF 4
FM AMEMBASSY BONN
TO SECSTATE WASHDC NIACT IMMEDIATE 7781
INFO AMEMBASSY LONDON IMMEDIATE
AMEMBASSY PARIS
USMISSION EC BRUSSELS
USMISSION OECD PARIS
USMISSION IAEA VIENNA
ERDA WASHDC
ERDA GERMANTOWN

UNCLAS SECTION 02 OF 03 BONN 07341

C. HIGH TEMPERATURE REACTOR

D. FAST BREEDER REACTOR

E. NUCLEAR FUELED SHIPS.

4. THE FUNDS FOR NUCLEAR SAFETY R AND D - DM 670 MIL-
LION - WILL BE EQUALLY DISTRIBUTED OVER THE FOUR-YEAR
PERIOD 1977-80. LIGHT WATER REACTOR SAFETY (DM 253
MILLION) IS CONDUCTED BY GERMAN RESEARCH CENTERS AND
THE PRIVATE REACTOR INDUSTRY. MAIN PROJECTS ARE:

A. EMERGENCY COOLING, LOSS OF COOLANT
INVESTIGATIONS

UNCLASSIFIED

UNCLASSIFIED

PAGE 02 BONN 07341 02 OF 03 281619Z

B. QUALITY ASSURANCE STUDIES

C. BURST PROOF CONTAINMENT RESEARCH

D. CORE MELT DOWN STUDIES.

SAFETY RESEARCH FOR ADVANCED REACTOR SYSTEMS
(DM 139 MILLION) IS DIRECTLY CONNECTED TO HTR

AND LMFBR PROGRAMS AND BMFT EXPRESSES HOPE THAT SUCH R AND D CAN BE CONDUCTED UNDER INTERNATIONAL COOPERATION AGREEMENTS. ANOTHER DM 117 MILLION WILL BE SPENT ON SAFETY STUDIES THAT ARE INDEPENDENT FROM THE REACTOR DESIGN, SUCH AS THE CONSEQUENCES OF AN EXTERNAL IMPACT, EMISSION AND PROPAGATION OF RADIOACTIVE MATERIAL, AND THE RISKS AND THE RELIABILITY OF NUCLEAR INSTALLATIONS. DM 52 MILLION WILL BE PROVIDED TO DEVELOP METHODS FOR THE DECOMMISSIONING AND REMOVAL OF NUCLEAR FACILITIES, WHILE GERMANY'S 100 MW THERMAL HOT STEAM REACTOR AT GROSSWELHEIM WILL BE THE SITE FOR A DM 52 MILLION PROGRAM TO STUDY REACTOR MATERIAL UNDER ABNORMAL CONDITIONS. FINALLY, DM 77 MILLION WILL BE SPENT ON RADIATION PROTECTION R AND D.

5. NUCLEAR FUEL CYCLE (DM 1068 MILLION)-
BMFT WILL CONTINUE TO FUND URANIUM EXPLORATION PROJECTS OF GERMAN COMPANIES ALL OVER THE WORLD WITH THE SAME AMOUNT AS IN THE PREVIOUS PROGRAM: DM 97 MILLION. EXISTING PROJECTS ARE FINANCED ON THE BASIS OF 20 PERCENT EACH FROM THE MINING COMPANIES AND THE ELECTRIC UTILITIES AND 60 PERCENT FROM BMFT. URANIUM CONVERSION DEVELOPMENT WILL RECEIVE NO FEDERAL FUNDING AS BMFT BELIEVES THAT THE NECESSARY TECHNIQUES ARE WELL ESTABLISHED
UNCLASSIFIED

UNCLASSIFIED

PAGE 03 BONN 07341 02 OF 03 281619Z

CHEMICAL TECHNOLOGIES. IN THE FIELD OF URANIUM ENRICHMENT MOST OF THE DM 217 MILLION WILL FLOW INTO RESEARCH ON CENTRIFUGE TECHNOLOGY. AN ADDITIONAL DM 239 MILLION HAS BEEN COMMITTED TO URANIT, THE GERMAN PARTNER OF THE BRITISH-DUTCH-GERMAN ENRICHMENT CONSORTIUM URENCO, TO SUBSIDIZE THE INSTALLATION OF A 2000 TONNES SWU PER YEAR ENRICHMENT CAPACITY. HOWEVER, THE JET NOZZLE TECHNOLOGY WILL ALSO BE PROMOTED, MAINLY UNDER THE PROVISIONS OF THE GERMAN-BRASILIAN NUCLEAR AGREEMENT. R AND D ON OTHER ENRICHMENT TECHNIQUES WILL ONLY BE PURSUED AT A LOW LEVEL. THE IMPLEMENTATION OF GERMANY'S PLAN TO CONSTRUCT AN INTEGRATED NUCLEAR FUEL CYCLE CENTER WILL BE SUPPORTED BY DM 730 MILLION DURING 1977-80. ALTHOUGH THE CONSTRUCTION AND OPERATION WILL BE THE RESPONSIBILITY OF GERMANY'S ELECTRIC UTILITIES, BMFT WILL PROVIDE FUNDS FOR THE CONSTRUCTION AND OPERATION OF NECESSARY PILOT AND DEMONSTRATION PLANTS FOR PERTINENT R AND D. FURTHERMORE,

THE GERMAN RESEARCH CENTERS WILL OFFER THEIR
CAPABILITY AND EXPERTISE IN THE DEVELOPMENT OF
ALTERNATIVE ENERGY TECHNOLOGIES. IN THIS CONTEXT
BMFT WILL UNDERTAKE STRONG EFFORTS TO PROMOTE
INTERNATIONAL COOPERATION. AN ANNUAL DM 6 MILLION
WILL BE PROVIDED TO DEVELOP EFFICIENT METHODS
FOR THE PHYSICAL PROTECTION OF NUCLEAR MATERIAL
AND ITS SAFEGUARDING.

UNCLASSIFIED

NNN

UNCLASSIFIED

PAGE 01 BONN 07341 03 OF 03 281621Z
ACTION SS-15

INFO OCT-01 EUR-12 IO-13 ISO-00 AID-05 CEA-01 CIAE-00
COME-00 DODE-00 EB-08 FEAE-00 FPC-01 H-02 INR-07
INT-05 L-03 NSAE-00 NSC-05 OMB-01 PM-04 OES-06
SP-02 STR-04 TRSE-00 ACDA-10 NSCE-00 SSO-00
USIE-00 INRE-00 NRC-07 /112 W
-----281700Z 030731 /50

O O 281603Z APR 77 ZFF 4
FM AMEMBASSY BONN
TO SECSTATE WASHDC NIACT IMMEDIATE 7782
INFO AMEMBASSY LONDON IMMEDIATE
AMEMBASSY PARIS
USMISSION EC BRUSSELS
USMISSION OECD PARIS
USMISSION IAEA VIENNA
ERDA WASHDC
ERDA GERMANTOWN

UNCLAS SECTION 03 OF 03 BONN 07341

6. HTR PROGRAM
WHILE THE FINANCING OF GERMANY'S FIRST
DEMONSTRATION HTR (THE THTR 300 TO BE COMPLETED
BY 1970), AMOUNTS TO DM 359 MILLION, BMFT
PROVIDES ANOTHER DM 557 MILLION FOR THE
DEVELOPMENT OF AN HTR SYSTEM FOR PROCESS
HEAT AND FOR FURTHER R AND D ON AN ELECTRICITY
PRODUCING HTR. DECISIONS ON THE LATTER WILL

NOT BE MADE BEFORE A SUFFICIENT TRIAL PERIOD
OF THE THTR 300. THE PROGRAM EXPLICITLY
STATES THAT NO DECISION ABOUT THE FUTURE HTR
FUEL CYCLE CAN BE MADE AS YET.

UNCLASSIFIED

UNCLASSIFIED

PAGE 02 BONN 07341 03 OF 03 281621Z

7. LMFBR PROGRAM:

APART FROM THE DM 805 MILLION CONTRIBUTION
TO THE CONSTRUCTION OF GERMANY'S 300 EMW
LMFBR - TO BE FINISHED BY 1982 - DM 82 MILLION
WILL BE PROVIDED FOR SUBSIDIARY RESEARCH.
INTENSIFIED RESEARCH ON PLUTONIUM TECHNOLOGY
WILL BE CONDUCTED AT THE KNK-II REACTOR AT
KARLSRUHE WHICH WILL RECEIVE DM 162 MILLION
FUNDING. IN THE PROGRAM PERIOD DM 379 MILLION
WILL FLOW INTO STUDIES OF THE COMMERCIALIZATION
OF THE LMFBR. AGAIN, SUCH A DECISION WILL
ONLY BE MADE AFTER SUFFICIENT EXPERIENCE WITH
GERMANY'S SNR 300 AND WITH THE FRENCH SUPERPHENIX,
WHICH HAS STRONG GERMAN COMPANY INVOLVEMENT.
SIMULTANEOUS STUDIES ON A GAS COOLED FAST
BREEDER THAT ARE CONDUCTED UNDER OECD-NEA
PROGRAMS RECEIVE DM 10 MILLION.

8. NUCLEAR FUELED SHIPS:

GERMAN PLANS TO BUILD A 80000 HP NUCLEAR
PROPELLED CONTAINER SHIP WILL BE SHELVED,
BECAUSE NO PRIVATE CUSTOMER COULD BE FOUND
FOR THE CONSTRUCTION OF THE DEMONSTRATION SHIP
"NCS 80". ALL EXISTING RESULTS WILL BE
DOCUMENTED FOR POSSIBLE LATER APPLICATION.
FURTHER RESEARCH ON THAT PROJECT WILL ONLY COVER
PROBLEMS OF A LATER COMMERCIALIZATION.

9. PRIOR TO 1973, FRG ENERGY R AND D FUNDING WAS
ALMOST EXCLUSIVELY DIRECTED TOWARD NUCLEAR ENERGY.
THE FUNDING RATIO (NUCLEAR: NON-NUCLEAR ENERGY
RESEARCH) WAS 45.2:1 IN 1973, 4.3:1 IN 1976, AND WILL
BE 2.7:1 BY 1980. IN THE NON-NUCLEAR AREA DM 940
MILLION WILL BE SPENT FOR RESEARCH ON THE BETTER
UNCLASSIFIED

UNCLASSIFIED

PAGE 03 BONN 07341 03 OF 03 281621Z

UTILIZATION OF COAL, BROWN COAL AND OTHER FOSSIL

FUELS, DM 570 MILLION ON DEVELOPMENT OF ALTERNATE
ENERGY SOURCES, AND DM 490 MILLION ON ENERGY CONSER-
VATION RESEARCH.

STOESSEL.

UNCLASSIFIED

NNN

Message Attributes

Automatic Decaptioning: X
Capture Date: 01-Jan-1994 12:00:00 am
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: ENERGY, RESEARCH, PROGRAMS (PROJECTS)
Control Number: n/a
Copy: SINGLE
Sent Date: 28-Apr-1977 12:00:00 am
Decaption Date: 01-Jan-1960 12:00:00 am
Decaption Note:
Disposition Action: n/a
Disposition Approved on Date:
Disposition Case Number: n/a
Disposition Comment:
Disposition Date: 01-Jan-1960 12:00:00 am
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1977BONN07341
Document Source: CORE
Document Unique ID: 00
Drafter: n/a
Enclosure: n/a
Executive Order: N/A
Errors: N/A
Expiration:
Film Number: D770148-1178
Format: TEL
From: BONN
Handling Restrictions: n/a
Image Path:
ISecure: 1
Legacy Key: link1977/newtext/t19770411/aaaaaivn.tel
Line Count: 337
Litigation Code IDs:
Litigation Codes:
Litigation History:
Locator: TEXT ON-LINE, ON MICROFILM
Message ID: 99303e9c-c288-dd11-92da-001cc4696bcc
Office: ACTION SS
Original Classification: UNCLASSIFIED
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 7
Previous Channel Indicators: n/a
Previous Classification: n/a
Previous Handling Restrictions: n/a
Reference: 77 BONN A-125
Retention: 0
Review Action: RELEASED, APPROVED
Review Content Flags:
Review Date: 11-Feb-2005 12:00:00 am
Review Event:
Review Exemptions: n/a
Review Media Identifier:
Review Release Date: n/a
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
SAS ID: 2671457
Secure: OPEN
Status: NATIVE
Subject: NEW GERMAN ENERGY R AND D PROGRAM
TAGS: ENRG, TECH, GE, (MATTHOEFER, HANS), (CASAGRANDE, RONALD)
To: STATE
Type: TE
vdkgvwkey: odb://SAS/SAS.dbo.SAS_Docs/99303e9c-c288-dd11-92da-001cc4696bcc
Review Markings:
Margaret P. Grafeld
Declassified/Released
US Department of State
EO Systematic Review
22 May 2009
Markings: Margaret P. Grafeld Declassified/Released US Department of State EO Systematic Review 22 May 2009